

OLEARIA ARCHERI (ASTERACEAE: ASTEREA), A NEW NAME FOR A FAMILIAR SPECIES FROM TASMANIA

by

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ABSTRACT

Lander, N. S. *Olearia archeri* (Asteraceae: Astereae), a new name for a familiar species from Tasmania. *Muelleria* 7(1): 117–121 (1989). — The neotypification by D. I. Morris of *Olearia persoonioides* var. *lanceolata* Benth. is shown to be superseded by the rediscovery of original material, here designated as the lectotype. A new species, *Olearia archeri*, is described and illustrated.

INTRODUCTION

D. I. Morris (1977) raised *Olearia persoonioides* (DC.) Benth. var. *lanceolata* Benth. to specific rank as *O. lanceolata* (Benth.) D. I. Morris. In the process of doing this Morris designated a neotype for the variety stating that 'it has not been possible to locate Bentham's type'.

Bentham (1867) cited no material in his protologue of *O. persoonioides* var. *lanceolata*. However, examination of *Olearia* specimens held at major Australian, British and Continental herbaria in the course of my ongoing revisionary studies in this genus has brought to light a specimen at K, originally from the Herbarium Hookeranum, annotated by J. D. Hooker as '*E[urbyia] persoonioides* β *lanceolata*' and subsequently annotated by Bentham as '*Olearia persoonioides* Benth. var. *lanceolata*' (Fig. 1). A small printed label reads 'FLORA AUSTRALIENSIS, named by Mr BENTHAM'; a handwritten note gives the relevant volume and page reference. Although it bears no collector's name, this specimen bears a typical R. C. Gunn label with the number 1142/1842 and was gathered at Mt Wellington on 1 March 1839.

The protologue of *O. persoonioides* var. *lanceolata* Benth. distinguishes it from the type variety as follows: 'Leaves lanceolate, almost acute. Flower heads fewer, but scarcely larger. Achenes glabrous.' The specimen described above matches this protologue in all details and it is the only original material encountered that is so annotated as a variety of *O. persoonioides* by Bentham. Thus its rediscovery supersedes Morris' neotypification: it is here designated as the LECTOTYPE of *Olearia persoonioides* var. *lanceolata* Benth. Duplicates (ISOLECTOTYPES) of this collection are held at HO and NSW.

Eurybia persoonioides var. *lanceolata* J.D. Hook. is validly and legitimately published (Hooker 1847) and, as the above specimen is clearly cited by Hooker, it must be accepted as the holotype. Neither this name or any reference to its place of publication is given by Bentham (1867) in his treatment of *O. persoonioides*.

The holotype of Hooker's *Eurybia persoonioides* var. *lanceolata*, and the lectotype of Bentham's *Olearia persoonioides* var. *lanceolata*, represents a narrow-leaved form of *O. persoonioides* of trivial significance taxonomically. It bears little resemblance to Morris' neotype which belongs unequivocally to the familiar and distinctive species hitherto known erroneously as *O. lanceolata*, which thus stands in need of a new name.

***Olearia archeri* Lander, nom. nov.**

Species *Olearia persoonioides* et *O. tasmaniae* affinis a quibus bracteis involueralibus ferentibus pilos glanduliferos, capitulis pedunculo communi, basibus antherae breviter sagittatis, appendicibus antherae ovatis, et stylo ferenti pilos T-formes differt. (Fig. 2).

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Fig. 1. Holotype of *Eurybia personioides* var. *lanceolata* J.D. Hook. and lectotype of *Olearia personioides* var. *lanceolata* Benth. Scale in cm.

TYPE: Cash's Lookout, Eaglehawk Neck, Tasmania, 10 November 1973, D. & A. Ratkowsky s.n. (HOLOTYPE: HO. ISOTYPE: K, Queen Victoria Museum, Launceston — n.v.)

MISSAPPLIED NAMES:

Olearia lanceolata auct. non (Benth.) D. I. Morris (1977) nec F. Muell. ex Sonder (1853); D. I. Morris, Rec. Queen Victoria Mus. 55: 1 (1977). — *Olearia persoonioides* var. *lanceolata* auct. non Benth.; L. Rodway, Tas. Fl. 74 (1903); W. Curtis, Stud. Fl. Tasm. 2: 304 (1963).

Shrub to 2 m high. Vestiture of stems, petioles, leaves, peduncles and involucre bracts pannose with multicellular, T-shaped, eglandular hairs. Stems erect, pinkish brown to yellowish grey when young, becoming brownish grey, striate and fissured. Leaves alternate and scattered basally, opposite and crowded apically, ascending, petiolate; petiole 3–7 mm long; lamina flat, narrowly elliptic, 12–99 × 3–15 mm, discolorous, pale yellowish brown abaxially, green adaxially; venation distinct, reticulate; vestiture pannose abaxially, subglabrous adaxially with multicellular,

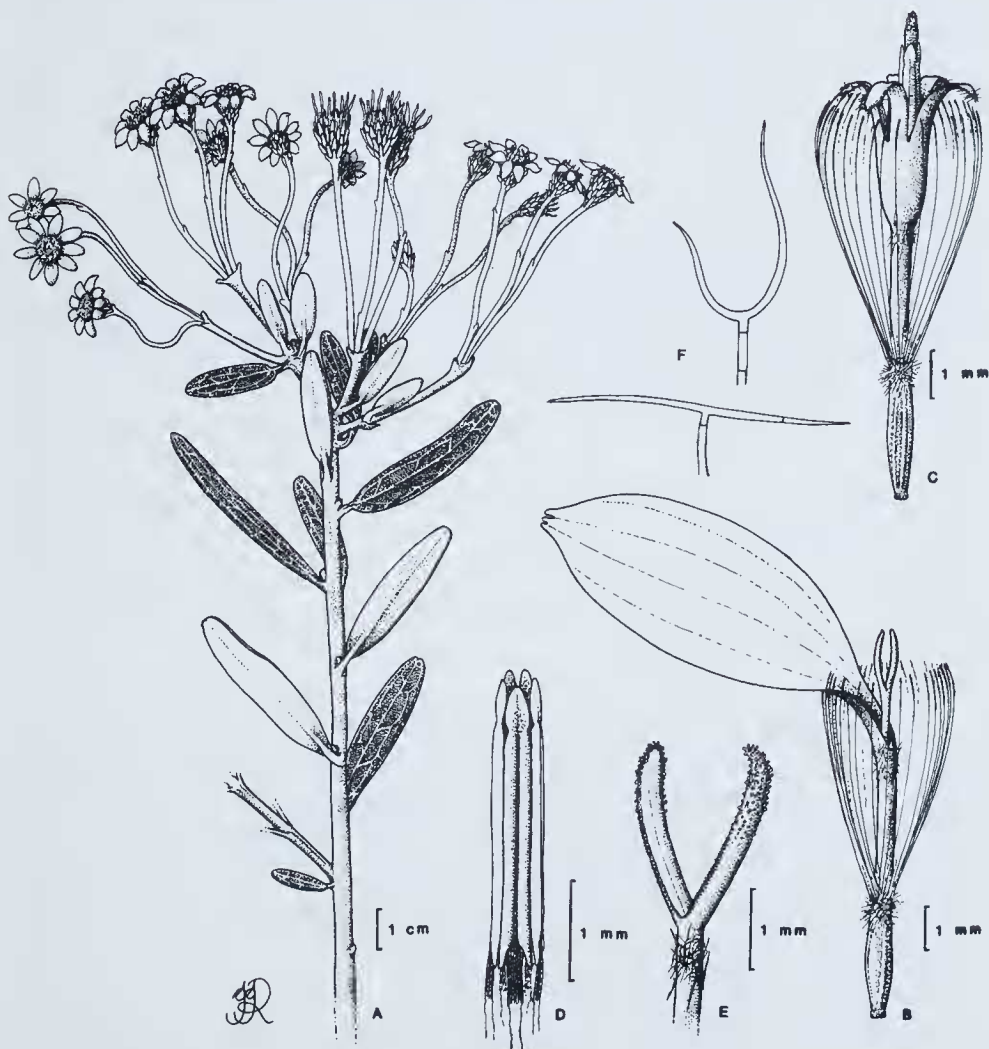


Fig. 2. *Olearia archeri* Lander. A — Habit. B — Ray floret. C — Disc floret. D — Anther tube. E — Stylar arms with T-shaped hairs. F — T-shaped hairs. Drawn from the holotype.

uniserial, capitate glandular hairs; texture coriaceous; base acute or rounded; margin entire, flat; apex rounded, mucous. *Heads* pedunculate, in 3-headed corymbose clusters forming large, terminal compound-corymbose confluences on a common peduncle, conspicuously radiate, 15.8–20.2 mm in diameter. *Peduncle* to 82 mm long with several leaf-like bracts grading into those of the involucre. *Involucre* campanulate; bracts 5–7-seriate, 2.7–8.6 × 0.8–1.6 mm. *Outer involucre bracts* somewhat cymbiform, narrowly triangular; stereome green, basally pannose abaxially with scattered multicellular, biserial, capitate hairs, chartaceous; margin fimbriate; apex rounded. *Inner involucre bracts* flat, narrowly triangular or elliptic; stereome green, pannose abaxially and densely glandular basally, chartaceous; margin fimbriate; apex acute. *Receptacle* weakly convex. *Ray florets* 7–9, uniserial, white, 13.1–16.4 mm long; tube weakly hairy centrally with T-shaped hairs; ligule elliptic, 8.8–11.2 × 3.5–4.2 mm, glabrous, acute, minutely 3-lobed apically; stylar arms filiform, 1.5–1.7 mm long. *Disc florets* 19–27, bisexual, yellow, infundibular, 8.6–9.6 mm long, with scattered T-shaped hairs centrally to apically; lobes 5, 2.5–3.2 mm long, acute; anthers 2.5–2.9 mm long, briefly sagittate basally and shorter than the filament collar, with ovate sterile appendage; filament collar 0.5–0.8 mm long; stylar arms 2.2–2.4 mm long, with scattered T-shaped hairs below the point of bifurcation, with half-conic sterile appendages bearing botuliform papillae above the stigmatic lines. *Achene* narrowly ellipsoid, 3.3–4.7 × 0.6–1.0 mm, brown, densely hairy apically with T-shaped hairs; venation indistinct; carpopodium central or slightly oblique. *Pappus* biserial, with 66–85 barbellate bristles subequal to the tubular florets, with the barbs longer towards the apex.

OTHER SPECIMENS EXAMINED (Total number examined 15):

Tasmania — Franklin Road, 43° 05' S., 147° 01' E., Oct. 1974, *M. Allan s.n.* (HO); Maria Range, Maria Island, 42° 37' S., 148° 06' E., *M.J. Brown 224* (HO); Nichols Cap, 41° 45' S., 148° 16' E., May 1984, *P. Collier s.n.* (HO); Mt Andrew, *P. Collier 974* (HO); Nichols Cap, W. of Seymour Beach, 41° 45' S., 148° 16' E., Jan. 1979, *S. Harris s.n.* (HO); McGregors Peak, *W.D. Jackson s.n.* (HO); Nichols Cap, 41° 33' S., 148° 06' E., *A. Moscal 183* (HO); Franklins Road, Kellevie, 42° 47' S., 147° 48' E., Nov. 1974, *D.A. & A.V. Ratkowsky 1317* (CANB, HO, K); Hospital Creek, Kellevie, 42° 47' S., 147° 48' E., Dec. 1973, *D.A. & A.V. Ratkowsky s.n.* (HO); Prossers Sugar Loaf, 42° 40' S., 147° 49' E., Sept. 1973, *D.A. & A.V. Ratkowsky s.n.* (HO); E. of Coppin, Kellevie, 42° 47' S., 147° 48' E., 1973, *D.A. & A.V. Ratkowsky s.n.* (K); NE. coast, s.dat., *L. Rodway s.n.* [ex herb. *Rodway 334*] (HO).

Cultivated — Royal Botanic Gardens, Kew, Richmond, Surrey, England, anno. 1976, s.leg. (K).

DISTRIBUTION:

On the east coast of Tasmania between 41° and 43° S., from near sea level to an altitude of 650 m.

ECOLOGY:

In shady situations in open sclerophyll forest on hillsides and stony slopes. Flowering September to March.

NOTES:

The T-shaped hairs found on the stems, dorsal leaf surfaces, involucre bracts, florets, styles and achenes of this species place it in *Olearia* sect. *Dicerotriche* Archer ex Benth. where it would appear to be closely related to *O. persoonioides* and *O. tasmanica* W. Curtis. Apart from the obvious differences in leaf shape and size, *O. archeri* can be distinguished from both these taxa by the glandular hairs found on its involucre bracts, the clusters of heads on a common peduncle, its basally briefly sagittate rather than distinctly tailed anther bases, its ovate rather than triangular anther appendages, and the T-shaped hairs on its styles. A curious feature of both *O. archeri* and *O. tasmanica* is the complete absence of the duplex hairs which predominate on the achenes of *O. persoonioides*.

The specific epithet honours William Archer (1820–1874), the pioneering botanical collector in Tasmania, whose study of trichome and pappus morphology in *Olearia* laid the ground for subsequent delimitation and classification of the genus (Archer 1861).

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REFERENCES

- Archer, W. (1861). On the value of hairs, as a character in determining the limits of subordinate groups of species, considered in connexion with the genera *Eurybia* (Cass.) and *Olearia* (Mönch), of Compositae. *Proc. Linn. Soc. London* 5: 17–25.
- Bentham, G. (1867). 'Flora Australiensis', vol. 3. (Lovell Reeve & Co.: London.)
- Hooker, J. D. (1847). *Florae tasmaniae spicilegium*. *Lond. J. Bot. (Hooker)* 6: 106–125.
- Morris, D. I. (1977). Miscellaneous notes on endemic Tasmanian plants in the genera *Olearia*, *Ixodia*, *Danthonia*, *Tetrarrhena*. *Records of the Queen Victoria Museum* 55: 1–5.

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